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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,436	12/12/2001	Timothy B. Cowles	00-0058.02	4282

7590 04/08/2005

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EXAMINER	
TU, CHRISTINE TRINH LE	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/022,436	COWLES ET AL.	
	Examiner	Art Unit	
	Christine T. Tu	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,10-12 and 55-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-6* is/are allowed.

6)☒ Claim(s) *10-12 and 55-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/22/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 10-12 and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (6,246,618 and Yamamoto hereinafter).

Claims 10-12:

Yamamoto discloses the invention substantially as claimed. Yamamoto teaches (figures 1 and 3) that a LSI comprises plurality of RAMs (10, 11, 12, 13) which are simultaneously tested by a BIST block (2) in responsive to a BIST mode. A test/repair control logic (2) sends control signals (signals for testing which include data and control signals) to the memory inputs of selectors (20-23) while the RAMs (10-13) are in a semiconductor integrated circuit. Such semiconductor integrated circuit does not have particular restrictions on the scale e.g. an LSI (figure1, column 5 lines 34-38 and column 6 lines 64-column 6 line 5; column 5 lines 36-40).

Yamamoto does not explicitly teach the system has a primary function other than test or repair function. However, Yamamoto teaches that the LSI can be in actual operation besides testing operation (column 6 lines 3-5). It would have been obvious to one skilled in the art at the time the invention was made to realize that Yamamoto's actually operation would have been a primary function. The artisan would have been motivated to interpret such that the recited "primary function" does not exclude from the inclusion of Yamamoto's actual (normal) operation.

Claims 55-56 and 57:

Yamamoto discloses the invention substantially as claimed. Yamamoto teaches (figures 1 and 3) that a LSI comprises plurality of RAMs (10, 11, 12, 13) which are simultaneously tested by a BIST block (2) in responsive to a BIST mode. A test/repair control logic (2) sends control signals (signals for testing which include data and control signals) to the memory inputs of selectors (20-23) while the RAMs (10-13) are in a semiconductor integrated circuit (e.g. LSI) (figure1, column 5 lines 34-38 and column 6 lines 64-column 6 line 5; column 5 lines 36-40). Yamamoto also teaches that a PG_SPRAM (81) writes/programs the RAMs (10-13) with test pattern for memory test (figure 3, column 7 lines 22-46).

Yamamoto does not explicitly teach the system has a primary function other than test or repair function. However, Yamamoto teaches that the LSI can be in actual operation besides testing operation (column 6 lines 3-5). It would have been obvious to one skilled in the art at the time the invention was made to realize that Yamamoto's actually operation would have been a primary function. The artisan would have been motivated to interpret such that the recited "primary function" does not exclude from the inclusion of Yamamoto's actual (normal) operation.

3. Applicant's arguments filed January 3, 2005 have been fully considered but they are not persuasive.

For claims 1-6, applicant's arguments overcome the rejection of claims 1-6.

For claim 10, applicant argues that there is no excerpt in Yamamoto addressing claim 10's "in-field" limitation. Examiner, however, disagrees applicant's position. Firstly, applicant should realize the limitation "in-field" added to claim 10 does not add any patentable weight in the claim. Base on the specification, the phrase "in the field" may include circumstances of wherein the die has been incorporated as part of an electronic system (as stated lines 3-5 in paragraph [0086]). Since Yamamoto's RAMs (10-13) [figure 1] are location inside an semiconductor integrated circuit (e.g. LSI), therefore, RAMs (10-13) are incorporated as part of the semiconductor integrated circuit (column 5 lines 36-40).

4. Claims 1-6 are allowed.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (571)272-3831. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571)272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christine T. Tu
Primary Examiner
Art Unit 2133

March 31, 2005